



## **Appendix H. Ecological incidents associated with dimethoate**

A search of the EIIS (Environmental Incident Information System) database for ecological incidents (run on November 2, 2007) identified are a total of 25 incidents associated with dimethoate that were reported from 1972-2005. Incidents included in EIIS are defined by a certainty index associated with the likelihood that the pesticide application described resulted in the observed incident. The certainty index defines incidents as unrelated, unlikely, possible, probable and highly probable. One notable source of uncertainty associated with the EIIS database is the nature of reporting of incidents. Many more incidents may have occurred due to dimethoate exposures but may not have been reported due to various factors, such as a lack of reporting, or a lack of witnessing of effects. Therefore, the lack of an incident report does not necessarily indicate a lack of an incident.

Of the 25 incidents associated with dimethoate exposures, 4 involved fish kills, 2 involved effects to terrestrial plants, 10 involved bee kills, and 9 involved bird mortalities. Several incidents occurred in California. The incidents associated with dimethoate are summarized in **Tables H.1-H.4.**

**Table H.1. Reported ecological incidents involving dimethoate exposures to fish.**

Incident ID	Organisms affected	Use Site	Date	Legality	Certainty	State	County	Total Magnitude	Other pesticides associated with incident
B0000-219-12	fish	LOADING AREA	NR	Misuse (accidental)	Probable	CA	RIVERSIDE	13000	methyl parathion, parathion, diazinon, malathion, thiodan
I000403-001	fish (several species)	Soybean	11-Aug-88	Registered Use	Probable	IL	TAZEWELL	9242	chlorpyrifos
I000804-014	fish	Lake	24-Jun-91	Misuse (intentional)	Probable	SD	HAAKON	unknown	2,4-D
I003826-002	fish	TOBACCO	12-Jun-95	Undetermined	Possible	NC	JOHNSTON	unknown	2,4-D, aldicarb, disulfoton

NR = not reported

**Table H.2. Reported ecological incidents involving dimethoate exposures to birds.**

Incident ID	Organisms affected	Use Site	Date	Legality	Certainty	State	County	Total Magnitude	Other pesticides associated with incident
B0000-219-02	cedar waxwing birds	Ornamental, woody	22-Mar-72	REGISTERED USE	Highly Probable	CA	TULARE	60-80	none
B0000-219-03	cedar waxwing birds	GARDEN	01-May-72	REGISTERED USE	Highly Probable	CA	CONTRA COSTA	unknown	diazinon, dieldrin
I005754-003	cedar waxwing birds	N/R	NR	REGISTERED USE	Possible	CA	NR	60	none
I000920-001	Canadian geese	Alfalfa	10-Jun-93	Registered use	Highly Probable	ID	Canyon	40	carbofuran
I005524-004	Canadian geese	ALFALFA	10-Feb-86	REGISTERED USE	Possible	CA	IMPERIAL	25	carbofuran
I005572-003	Canadian geese	ALFALFA	22-May-88	Misuse (accidental)	Probable	ID	NR	150	carbofuran, disulfoton
I005751-001	Canadian geese	ALFALFA	01-May-88	Misuse (accidental)	Probable	ID	NR	hundreds	carbofuran, disulfoton
I010916-001	rock dove	N/R	09-Aug-00	Misuse (intentional)	Highly Probable	NY	ONONDAGA	1	none
I000403-001	turkeys	Soybean	11-Aug-88	Registered Use	Probable	IL	TAZEWELL	5	chlorpyrifos

**Table H.3. Reported ecological incidents involving dimethoate exposures to terrestrial invertebrates (bees).**

Incident ID	Organism s affected	Use Site	Date	Legality	Certainty	State	County	Total Magnitude	Other pesticides associated with incident
I003826-009	bees	ORCHARD	28-Apr-95	Undetermined	Probable	NC	HENDERSON	unknown	captan, carbaryl, endosulfan, methyl parathion
I013587-012	bees	Not reported	14-Jul-99	Undetermined	Possible	WA	Grant	150 Hives	carbaryl, chlorothalonil, methamidophos
I013883-018	leaf cutter bees	Potato	15-Jul-97	Registered use	Highly Probable	WA	GRANT	unknown	carbofuran, methamidophos
I013884-020	honey bee	Bean	12-Aug-98	Registered use	Possible	WA	ADAMS	20 colonies	none
I013884-024	honey bee	Bean	21-Aug-98	Undetermined	Possible	WA	Adams	20 colonies	naled
I013884-028	bees	Orchard (unspecified)	15-Apr-98	Registered use	Possible	WA	Yakima	unknown	chlorpyrifos
I013884-033	leaf cutter bees	Bean	08-Jul-98	Registered use	Possible	WA	Yakima	unknown	none
I014341-006	bees	Orchard (unspecified)	01-Jan-96	Undetermined	Possible	WA	Benton	1256	chlorpyrifos
I014341-015	bees	Bean	01-Jan-98	Undetermined	Possible	WA	Grant	unknown	naled
I014341-016	bees	N/R	01-Jan-98	Undetermined	Possible	WA	Grant	20 hives	bentazon

**Table H.4. Reported ecological incidents involving dimethoate exposures to plants.**

Incident ID	Organisms affected	Use Site	Date	Legality	Certainty	State	County	Total Magnitude	Other pesticides associated with incident
I013587-025	lentila and pasture plants	Lentils	17-Jul-99	Misuse	Probable	WA	Spokane	unknown	none
I016940-010	corn	Corn	03-Mar-05	Misuse	Highly Probable	CA	Imperial	30 Acres	cyfluthrin